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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,592	04/08/2004	Dustin L. Winters	87448RLO	8153
7590 11/09/2005				
Pamela R. Crocker Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201			EXAMINER WON, BUMSUK	
			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/820,592	WINTERS, DUSTIN L.	
	Examiner	Art Unit	
	Bumsuk Won	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/8/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/8/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to because figures 4a, 4b, and 4c are not clear. The background of the graphs of the mentioned figures are too dark. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Xu (US 6,133,692) which is Applicant's admitted prior art.

Regarding claim 1, Xu discloses an OLED device (abstract), comprising: a) at least one light emitting layer (16) arranged to produce light in a predetermined emitting area (not shown); b) a reflector (15) and a semi-transparent reflector (21, column 3, lines 2-11) forming a microcavity structure (12) for resonating the light produced in the at least one light emitting layer (abstract); and c) a color filter element (13) disposed relative to a first portion (13, where R, G, and B are written) of the predetermined emitting area (not shown) so as to filter the light produced by the at least one light emitting layer (16) and transmit unfiltered light through a second portion (13, where R, G, and B are not written) of the predetermined emitting area (not shown).

Regarding claim 2, Xu discloses the reflector (figure 1, 15) serves as electrode for the light emitting layer (column 2, lines 45-48).

Regarding claim 6, Xu discloses the color filter element (figure 1, 13) includes spaced striped filtered portions (figure 1).

Regarding claim 7, Xu discloses the color filter element (figure 1, 13) includes openings (two openings between R and G, and G and B) in the color filter element to provide the unfiltered light (figure 1, the emitted light will pass through the openings which will not be filtered).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu (US 6,133,692) which is Applicant's admitted prior art in view of Forrest (US 2003/0213967).

Regarding claim 3, Xu discloses all of the claimed limitations except for the semi-transparent reflector is Ag or an alloy containing Ag. Forrest discloses a semi-transparent reflector in an OLED device is an alloy containing Ag (paragraph 76), for the purpose of having good conductivity.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an alloy containing Ag for a semi-transparent reflector disclosed by Forrest in the OLED device disclosed by Xu, for the purpose of having good conductivity.

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Regarding claim 4, Forrest discloses an OLED device is top emitting (paragraph 44, figure 2c). The reason for combining is the same as for claim 3 above.

Regarding claim 5, Forrest discloses an OLED device is bottom emitting (figure 2a). The reason for combining is the same as for claim 3 above.

Claims 8-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu (US 6,133,692) which is Applicant's admitted prior art in view of Yu (US 6,303,943).

Regarding claim 8, Xu discloses an OLED device (abstract), wherein each sub pixel (figure 1) comprising: a) at least one light emitting layer (16) arranged to produce light in a predetermined emitting area (not shown); b) a reflector (15) and a semi-transparent reflector (21, column 3, lines 2-11) forming a microcavity structure (12) for resonating the light produced in the at least one light emitting layer (abstract); and c) a color filter element (13) disposed relative to a first portion (13, where R, G, and B are written) of the predetermined emitting area (not shown) so as to filter the light produced by the at least one light emitting layer (16) and transmit unfiltered light through a second portion (13, where R, G, and B are not written) of the predetermined emitting area (not shown).

Xu does not disclose the OLED is a multicolor OLED device having an array of pixels which include different subpixels that emit different color light.

Yu discloses the OLED is a multicolor OLED device having an array of pixels which include different subpixels that emit different color light (figure 5, column 15, lines 25-31), for the purpose of generating multicolor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an array of pixels which include different subpixels that emit different color light disclosed by Yu in the OLED disclosed by Xu, for the purpose of generating multicolor.

Regarding claim 9, Yu discloses the subpixels produce red, green, and blue light. The reason for combining is the same as for claim 8 above.

Regarding claim 10, Xu discloses the reflector (figure 1, 15) serves as electrode for the light emitting layer (column 2, lines 45-48).

Regarding claim 14, Yu discloses an OLED further comprises active matrix circuitry to drive the subpixels (column 1, lines 43-57). The reason for combining is the same as for claim 8 above.

Regarding claim 15, Xu discloses the color filter element (figure 1, 13) includes spaced striped filtered portions (figure 1).

Regarding claim 16, Xu discloses the color filter element (figure 1, 13) includes openings (two openings between R and G, and G and B) in the color filter element to provide the

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unfiltered light (figure 1, the emitted light will pass through the openings which will not be filtered).

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu (US 6,133,692) which is Applicant's admitted prior art in view of Yu (US 6,303,943), in further view of Forrest (US 2003/0213967).

Regarding claim 11, Xu in view of Yu discloses all of the claimed limitations except for the semi-transparent reflector is Ag or an alloy containing Ag. Forrest discloses a semi-transparent reflector in an OLED device is an alloy containing Ag (paragraph 76), for the purpose of having good conductivity.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an alloy containing Ag for a semi-transparent reflector disclosed by Forrest in the OLED device disclosed by Xu in view of Yu, for the purpose of having good conductivity.

Regarding claim 12, Forrest discloses an OLED device is top emitting (paragraph 44, figure 2c). The reason for combining is the same as for claim 11 above.

Regarding claim 13, Forrest discloses an OLED device is bottom emitting (figure 2a). The reason for combining is the same as for claim 11 above.

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Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bumsuk Won whose telephone number is 571-272-2713. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bumsuk Won
Patent Examiner



JOSEPH WILLIAMS
PRIMARY EXAMINER